



## Complete Summary

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### TITLE

Nursing facility chronic care: percent of residents who have moderate to severe pain.

### SOURCE(S)

U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. National nursing home quality measures. User's manual. Cambridge (MA): Abt Associates, Inc.; 2004 Nov (v1.2). 48 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

#### Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure is used to assess the percentage of residents who have moderate to severe pain.

### RATIONALE

Residents should always be checked regularly by nursing home staff to see if they are having pain. Residents (or someone on their behalf) should let staff know if they are in pain so efforts can be made to find the cause and make the resident more comfortable. If pain is not treated, a resident may not be able to perform daily routines, may become depressed, or have an overall poor quality of life. This percentage may include some residents who are getting or have been prescribed treatment for their pain, but who refuse pain medicines or choose to take less. Some residents may choose to accept a certain level of pain so they can stay more alert.

This measure is one of fifteen National Nursing Home Quality Improvement (NHQI) measures. These measures provide information to help consumers make informed decisions about their nursing home care. The measures are also intended to motivate nursing homes to improve their care and to inform discussions about quality between consumers and clinicians.

#### PRIMARY CLINICAL COMPONENT

Chronic care; pain

#### DENOMINATOR DESCRIPTION

All residents with a valid target assessment (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

#### NUMERATOR DESCRIPTION

Number of residents from the denominator with moderate pain at least daily OR horrible/excruciating pain at any frequency on the target assessment

### Evidence Supporting the Measure

#### EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

### Evidence Supporting Need for the Measure

#### NEED FOR THE MEASURE

Use of this measure to improve performance

#### EVIDENCE SUPPORTING NEED FOR THE MEASURE

Nursing home compare. [internet]. Baltimore (MD): Centers for Medicare & Medicaid Services (CMS); 2000-[updated 2005 Sep 01]; [cited 2005 Nov 28].

### State of Use of the Measure

#### STATE OF USE

Current routine use

#### CURRENT USE

Internal quality improvement  
National reporting

## Application of Measure in its Current Use

### CARE SETTING

Long-term Care Facilities

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

### TARGET POPULATION AGE

Patients of all ages

### TARGET POPULATION GENDER

Either male or female

### STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

## Characteristics of the Primary Clinical Component

### INCIDENCE/PREVALENCE

About 3 million elderly and disabled Americans received care in our nation's nearly 17,000 Medicare and Medicaid-certified nursing homes in 2001. Slightly more than half of these were long-term nursing home residents, but nearly as many had shorter stays for rehabilitation care after an acute hospitalization. About 75 percent were age 75 or older.

### EVIDENCE FOR INCIDENCE/PREVALENCE

Nursing home quality initiative. Overview. Baltimore (MD): U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services (CMS); 2004 Jan 20. 3 p.

### ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

### BURDEN OF ILLNESS

See "Rationale" field.

## UTILIZATION

Unspecified

## COSTS

Unspecified

## Institute of Medicine National Healthcare Quality Report Categories

## IOM CARE NEED

Living with Illness

## IOM DOMAIN

Effectiveness

## Data Collection for the Measure

## CASE FINDING

Users of care only

## DESCRIPTION OF CASE FINDING

All residents with a valid target assessment

## DENOMINATOR SAMPLING FRAME

Patients associated with provider

## DENOMINATOR INCLUSIONS/EXCLUSIONS

### Inclusions

All residents with a valid target assessment

### Exclusions

Residents satisfying any of the following conditions:

1. The target assessment is an admission assessment.
2. Either missing or inconsistent values for a specified item on the target assessment.

Refer to the original measure documentation for details.

## RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

#### DENOMINATOR (INDEX) EVENT

Diagnostic Evaluation  
Institutionalization

#### DENOMINATOR TIME WINDOW

Time window precedes index event

#### NUMERATOR INCLUSIONS/EXCLUSIONS

##### Inclusions

Number of residents from the denominator with moderate pain at least daily OR horrible/excruciating pain at any frequency on the target assessment

Refer to the original measure documentation for details.

##### Exclusions

Unspecified

#### MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

#### NUMERATOR TIME WINDOW

Encounter or point in time

#### DATA SOURCE

Special or unique data

#### LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

#### OUTCOME TYPE

Clinical Outcome

#### PRE-EXISTING INSTRUMENT USED

CMS Minimum Data Set - Resident Assessment Instrument (Version 2.0)

## Computation of the Measure

### SCORING

Rate

### INTERPRETATION OF SCORE

Better quality is associated with a lower score

### ALLOWANCE FOR PATIENT FACTORS

Risk adjustment devised specifically for this measure/condition

### DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

Risk adjustment refines raw quality measure (QM) scores to better reflect the prevalence of problems that facilities should be able to address. Two complementary approaches to risk adjustment were applied to the National Quality Forum (NQF)-endorsed QMs.

One approach involves exclusion of residents whose outcomes are not under nursing facility control (e.g., outcome is evidenced on admission to the facility). For each QM, the prevalence of the outcome across all residents in a nursing facility, after exclusions, is the facility-level observed QM score.

A second approach involves adjusting QM scores directly, using logistic regression. This method of adjustment employs resident-level covariates that have been found to increase the risks of an outcome.

- First, resident-level covariates were used in a logistic regression model to calculate a resident-level expected QM score (the probability that the resident will evidence the outcome, given the presence or absence of characteristics measured by the covariates).
- Then, an average of all resident-level expected QM scores for the nursing facility was calculated to create a facility-level expected QM score.
- The final facility-level adjusted QM score was based on a calculation which combines the facility-level expected score and the facility-level observed score.

Refer to the original measure documentation for details.

### STANDARD OF COMPARISON

External comparison at a point in time  
Internal time comparison

## Evaluation of Measure Properties

### EXTENT OF MEASURE TESTING

The quality measures have been validated and are based on the best research currently available. These quality measures meet four criteria. They are important to consumers, are accurate (reliable, valid and risk adjusted), can be used to show ways in which facilities are different from one another, and can be influenced by the provision of high quality care by nursing home staff. A formal validation study was conducted involving 5,758 chronic and post-acute residents in 209 nursing facilities in 6 states.

#### EVIDENCE FOR RELIABILITY/VALIDITY TESTING

Abt Associates, Inc, U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. Validation of long-term and post-acute care quality indicators. Cambridge (MA): Abt Associates, Inc.; 2003 Jun 10. 93 p.

### Identifying Information

#### ORIGINAL TITLE

Percent of residents who have moderate to severe pain.

#### MEASURE COLLECTION

[Nursing Home Quality Initiative: National Nursing Home Quality Measures](#)

#### MEASURE SET NAME

[Chronic Care Quality Measures](#)

#### DEVELOPER

Centers for Medicare & Medicaid Services

#### ENDORSER

National Quality Forum

#### INCLUDED IN

National Healthcare Disparities Report (NHDR)  
National Healthcare Quality Report (NHQR)  
Nursing Home Compare

#### ADAPTATION

Measure was not adapted from another source.

#### RELEASE DATE

2004 Jan

## REVISION DATE

2004 Nov

## MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Abt Associates, Inc, U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. National nursing home quality measures. User's manual. Cambridge (MA): Abt Associates, Inc.; 2004 Jan 1 (v1). 46 p.

## SOURCE(S)

U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. National nursing home quality measures. User's manual. Cambridge (MA): Abt Associates, Inc.; 2004 Nov (v1.2). 48 p.

## MEASURE AVAILABILITY

The individual measure, "Percent of residents who have moderate to severe pain," is published in "National Nursing Home Quality Measures. User's Manual." This document is available in Portable Document Format (PDF) from the [Centers for Medicare and Medicaid Services \(CMS\) Web site](#).

For more information, refer to the CMS Web site at, [www.cms.hhs.gov](http://www.cms.hhs.gov).

## COMPANION DOCUMENTS

The following is available:

- Nursing Home Compare. [internet]. Baltimore (MD): Centers for Medicare and Medicaid Services. 2000- [updated 2005 Sep 1]; [cited 2005 Nov 28]. This tool is available from the [Medicare Web site](#).
- Quality measures for long-stay residents. Baltimore (MD): Centers for Medicare & Medicaid Services; 2004 Nov. 16 p. This document is available in Portable Document Format (PDF) from the [Centers for Medicare & Medicaid Services \(CMS\) Web site](#).

## NQMC STATUS

The NQMC summary was completed by ECRI on July 22, 2004. The information was verified by the measure developer on August 30, 2004. This NQMC summary was updated by ECRI on November 28, 2005. The information was verified by the measure developer on February 8, 2006.

## COPYRIGHT STATEMENT

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The logo for FIRSTGOV, with "FIRST" in blue and "GOV" in red, and a small red star above the "I".

